CLAIMS

What is claimed is:

1. 1. A method, comprising:

2. receiving a request for an information object at an anycast network address; and

3. resolving the request to a corresponding unicast address for the information object.

1. 2. The method of claim 1 further comprising returning the unicast address for the information

2. object.

1. 3. The method of claim 1 wherein the request is received at an information object repository

2. selected without regard as to whether the information object is actually stored at the information

3. object repository.

1. 4. The method of claims 3 further comprising instructing the selected information object

2. repository to obtain a copy of the information object.

1. 5. The method of claim 3 the information object repository is selected according to specified

2. performance metrics.

1. 6. The method of claim 5 wherein the performance metrics comprise one or more of: average

2. delay from the selected information object repository to a source of the request, average processing

3. delay at the selected information object repository, reliability of a path from the selected

4. information object repository, available bandwidth in said path, and loads on the selected

5. information object repository.

1　7.　An information object repository configured to resolve a network layer anycast address to a

2　network layer unicast address in response to a request for an information object at the network

3　layer anycast address.

4　8.　The information object repository of claim 7 being further configured to resolve the network

5　layer anycast address by transmitting a request for the network layer unicast address and awaiting a

6　response thereto.

1　9.　The information object repository of claim 8 being further configured to return a failure

2　message to a source of the request for the information object if the response to the request for the

3　network layer unicast address is not received within a timeout period.

1　10.　A network, comprising:

2　　　　at lest one client configured to transmit a request for an information object using a network

3　layer anycast address; and

4　　　　an information object repository configured to receive the request for the information

5　object and to resolve the network layer anycast address into a network layer unicast address.

1　11.　The network of claim 10 wherein the information object repository is further configured to

2　resolve the network layer anycast address by transmitting a request for the network layer unicast

3　address and awaiting a response thereto.

1　12.　The network of claim 11 wherein the information object repository is further configured to

2　return a failure message to the client if the response to the request for the network layer unicast

3　address is not received within a timeout period.

4　13.　The network of claim 12 wherein the request for the network layer unicast address comprises

5　a single IP packet that includes the network layer anycast address.

1 14. The network of claim 13 wherein the response to the request for the network layer unicast

2 address comprises a single IP packet that includes the network layer unicast address.

1 15. The network of claim 14 wherein the response to the request for the network layer unicast

2 address is returned by a host having the network layer unicast address.

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